

**PATENT COOPERATION TREATY**

From the INTERNATIONAL BUREAU

**PCT****INTERNATIONAL APPLICATION STATUS FORM  
(IASF)**

**Date of issue of this IASF:**  
 (the information contained in this IASF reflects the status  
 of the international application as of this date)  
 09 February 2006 (09.02.2006)

UNITED STATES PATENT AND TRADEMARK OFFICE  
 Commissioner for Patents,  
 P.O.Box 1450  
 Alexandria VA 22313 -1450  
 ETATS-UNIS D'AMERIQUE

**I - INTERNATIONAL APPLICATION**

I-1	International application number:	PCT/JP2004/010459
I-2	International filing date:	23 July 2004 (23.07.2004)
I-3	Earliest priority date:	24 July 2003 (24.07.2003)
I-4	Title of the invention:	HETERO TYPE PENTAMER RECOMBINANT VACCINE
I-5	International Patent Classification:	7 C07K 19/00, C12N 15/62, A61K 39/12
I-6	Language of filing:	Japanese
I-7	The State for which the Office acts as a designated Office has been designated in the international application:	Yes
I-7-1	Indication of the State(s) designated in the international application in respect of which the Office acts as a designated Office (only where the designated Office is a regional Office):	Not applicable
I-7-2	The international application has been considered withdrawn in a declaration made by the receiving Office on (date):	Not applicable
I-7-3	The international application or the designation of the State for which the Office acts as a designated Office has been withdrawn by the applicant (date on which withdrawal became effective):	Not applicable
I-7-4	Kind of protection or treatment:	Patent
I-7-4-1	Identification of parent application or parent grant:	Not applicable
I-8	Date of receipt of record copy by the International Bureau:	05 August 2004 (05.08.2004)
I-9	Applicant(s) and/or inventor(s) for the State(s) for which the Office acts as a designated Office	
I-9-1	Applicant and/or inventor	
I-9-1-1	Data currently on record	
I-9-1-1-1	Applicant's and/or inventor's name:	ARAKAWA, Takeshi
I-9-1-1-2	Address:	LM Shuri-Tobaru 406, 11-6, Shuri-Tobaru-cho 1-chome Naha-shi, Okinawa 9030822 Japan
I-9-1-1-3	State of nationality:	JP
I-9-1-1-4	State of residence:	JP
I-9-1-1-5	This person is:	Applicant and inventor

I-9-1-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.
I-9-1-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable
I-9-2	Applicant and/or inventor	
I-9-2-1	Data currently on record	
I-9-2-1-1	Applicant's and/or inventor's name:	KIKUKAWA, Masanao
I-9-2-1-2	Address:	24-10, Minatogawa 1-chome Urasoe-shi, Okinawa 9012134 Japan
I-9-2-1-3	State of nationality:	JP
I-9-2-1-4	State of residence:	JP
I-9-2-1-5	This person is:	Applicant and inventor
I-9-2-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.
I-9-2-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable
I-9-3	Applicant and/or inventor	
I-9-3-1	Data currently on record	
I-9-3-1-1	Applicant's and/or inventor's name:	SHIMABUKURO, Isao
I-9-3-1-2	Address:	21-5, Tsuboyacho 1-chome Naha-shi, Okinawa 9020065 Japan
I-9-3-1-3	State of nationality:	JP
I-9-3-1-4	State of residence:	JP
I-9-3-1-5	This person is:	Applicant and inventor
I-9-3-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.
I-9-3-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable
I-9-4	Applicant and/or inventor	
I-9-4-1	Data currently on record	
I-9-4-1-1	Applicant's and/or inventor's name:	TADANO, Masayuki
I-9-4-1-2	Address:	16-30, Takahara 4-chome Okinawa-shi, Okinawa 9042171 Japan
I-9-4-1-3	State of nationality:	JP
I-9-4-1-4	State of residence:	JP
I-9-4-1-5	This person is:	Applicant and inventor
I-9-4-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.

I-9-4-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable
I-9-5	Applicant and/or inventor	
I-9-5-1	Data currently on record	
I-9-5-1-1	Applicant's and/or inventor's name:	MATSUMOTO, Yasunobu
I-9-5-1-2	Address:	6-2-7-304, Oji Kita-ku, Tokyo 1140002 Japan
I-9-5-1-3	State of nationality:	JP
I-9-5-1-4	State of residence:	JP
I-9-5-1-5	This person is:	Applicant and inventor
I-9-5-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.
I-9-5-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable
I-9-6	Applicant and/or inventor	
I-9-6-1	Data currently on record	
I-9-6-1-1	Applicant's and/or inventor's name:	TSUJI, Naotsuhi
I-9-6-1-2	Address:	415-1, Matsushiro 4-chome Tsukuba-shi, Ibaraki 3050035 Japan
I-9-6-1-3	State of nationality:	JP
I-9-6-1-4	State of residence:	JP
I-9-6-1-5	This person is:	Applicant and inventor
I-9-6-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.
I-9-6-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable
I-9-7	Applicant and/or inventor	
I-9-7-1	Data currently on record	
I-9-7-1-1	Applicant's and/or inventor's name:	SATO, Yoshiya
I-9-7-1-2	Address:	693-1, Aza Adaniya Kitankagusuku-son Nakagami-gun, Okinawa 9012316 Japan
I-9-7-1-3	State of nationality:	JP
I-9-7-1-4	State of residence:	JP
I-9-7-1-5	This person is:	Applicant and inventor
I-9-7-2	Data previously on record (in case of a change recorded by the International Bureau under Rule 92bis):	No data previously on record available for inclusion in this IASF; any such data is available from the IB.
I-9-7-3	Indication of the State(s) designated in the international application for the purposes of which the person is an applicant and/or inventor (only where the designated Office is a regional Office):	Not applicable

I-10	The international application contains sequence listings and/or tables filed under Section 801(a) of the Administrative Instructions:	No
I-11	The following declaration(s) referred to in Rule 4.17 made for the purposes of the State(s) for which the Office acts as a designated Office was (were) contained in the international application as filed or received by the International Bureau before the expiration of the time limit under Rule 20r.1:	
I-11-1	Declaration(s) as to the identity of the inventor (Rules 4.17(i) and 51bis.1(a)(i)):	Not applicable
I-11-2	Declaration(s) as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)):	Not applicable
I-11-3	Combined declaration(s) as to the identity of the inventor (Rules 4.17(i) and 51bis.1(a)(i)) and the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)):	Not applicable
I-11-4	Declaration(s) as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):	Not applicable
I-11-5	Declaration(s) of inventorship (only for the purposes of the designation of the United States of America) (Rules 4.17(iv) and 51bis.1(a)(iv)):	Not applicable
I-11-6	Declaration(s) as to non-prejudicial disclosures or exceptions to lack of novelty (Rules 4.17(v) and 51bis.1(a)(v)):	Not applicable
<b>II - PRIORITY CLAIM(S)</b>		
II-1	Number of earlier application:	2003-279156
II-1-1	Filing date of earlier application:	24 July 2003 (24.07.2003)
II-1-2	Country in which, or regional Office or receiving Office with which earlier application was filed (where the earlier application is an ARIPO application, indication of the country party to the Paris Convention or Member of the World Trade Organization for which that earlier application was filed):	JP
II-1-3	Priority document received at the International Bureau on:	16 December 2004 (16.12.2004)
II-1-4	Priority document submitted or transmitted in compliance with Rule 17.1(a) or (b) (only where priority document was received at the International Bureau):	Yes
II-1-5	Applicant has requested the receiving Office to prepare and transmit the priority document in compliance with Rule 17.1(b) (only where no priority document was received at the International Bureau):	Not applicable
II-1-6	Priority claim withdrawn by a notice from the applicant (date on which withdrawal became effective; if the notice of withdrawal was received by the International Bureau after completion of technical preparations for international publication, such withdrawal will not have been reflected in the pamphlet) (Rule 90bis.3):	Not applicable
II-1-7	Declaration by the receiving Office or the International Bureau that priority claim is considered, for the purposes of the procedure under the Treaty, not to have been made (date of declaration) (Rule 26bis.2(b)):	Not applicable
II-2	Number of earlier application:	2003-412053
II-2-1	Filing date of earlier application:	10 December 2003 (10.12.2003)
II-2-2	Country in which, or regional Office or receiving Office with which earlier application was filed (where the earlier application is an ARIPO application, indication of the country party to the Paris Convention or Member of the	JP

	World Trade Organization for which that earlier application was filed):	
II-2-3	Priority document received at the International Bureau on:	16 September 2004 (16.09.2004)
II-2-4	Priority document submitted or transmitted in compliance with Rule 17.1(a) or (b) (only where priority document was received at the International Bureau):	Yes
II-2-5	Applicant has requested the receiving Office to prepare and transmit the priority document in compliance with Rule 17.1(b) (only where no priority document was received at the International Bureau):	Not applicable
II-2-6	Priority claim withdrawn by a notice from the applicant (date on which withdrawal became effective; if the notice of withdrawal was received by the International Bureau after completion of technical preparations for international publication, such withdrawal will not have been reflected in the pamphlet) (Rule 90bis.3):	Not applicable
II-2-7	Declaration by the receiving Office or the International Bureau that priority claim is considered, for the purposes of the procedure under the Treaty, not to have been made (date of declaration) (Rule 26bis.2(b)):	Not applicable

**III - INTERNATIONAL SEARCH REPORT**

III-1	International Searching Authority carrying out the international search:	ISA/JP
III-2	International search report or declaration under Article 17 (2)(a) received by the International Bureau:	Yes
III-3	Corrected version(s) of the international search report (if any) received by the International Bureau:	Not applicable

**IV - REFERENCE TO DEPOSITED BIOLOGICAL MATERIAL**

Not applicable

**V - INTERNATIONAL PUBLICATION**

V-1	International publication number:	WO 2005/010050 (A1)
V-2	International publication date:	03 February 2005 (03.02.2005)
V-3	Language of publication:	Japanese
V-4	Number of figure of drawing published together with the abstract:	3+T
V-5	Republication(s) (republication date(s) and reason(s)):	Not applicable

**VI - INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I)**

VI-1	International preliminary report on patentability (Chapter I) issued by the International Bureau on:	Not applicable
VI-2	Corrected version(s) of the international preliminary report on patentability (Chapter I) (if any) issued by the International Bureau on:	Information not available for inclusion in this IASF

**VII - INTERNATIONAL PRELIMINARY EXAMINATION**

VII-1	A demand electing the State(s) for which the Office acts as an elected Office has been received by the International Preliminary Examining Authority (where the elected Office is a regional Office, indication of the State(s) elected in respect of which the Office acts as an elected Office):	No
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